ACADEMIC ACHIEVEMENT OF TRIBAL STUDENTS IN THE NILIGIRIS DISTRICT IN RELATION TO THEIR STRESS

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Abstract

The present study aims to find out the extent of relationship between academic achievement of tribal students and their stress. Stress is the combination of psychological, physiological and behavioral reactions that people have in response to events that threaten or challenge them. Stress affects students in multiple ways. This research paper provides a conceptual overview of the direct and indirect pathways through which stress affects physical, mental and social health and the cognitive effects on academic success. The study is carried out on a sample of 300 tribal students in The Nilgiris District of Tamil Nadu.

Keywords: Academic achievement, Stress, Tribal, The Nilgiris.

INTRODUCTION

Tribals in India, geographically and culturally, differ in their stages of social as well as economic development, and their problems also differ from area to area within their own groups. A tribe may be seen as a sub group of the society. The tribal population is characterized by a heterogeneous cultural pattern with variegated economic conditions and activities depending largely on ecology. There are also wide variations in psychological, cultural, social, economic and political background of various tribal groups. There are approximately two hundred million tribal people in the entire globe, which means, about 4% of the global population. They are found in many regions of the world and majority of them are the poorest amongst poor. There is a substantial list of Scheduled Tribes in India recognized as Tribal under the Constitution of India. Tribal people constitute 8.6% of the total population of the country, numbering 104.3 million (2011 Census). According to 2011 Census, Tamilnadu State's total population is 72.14 million, the population of Scheduled Tribes is 7.9 lakhs, constituting 1.1% of the total population. The tribal population in the Tamilnadu state is largely concentrated in The Nilgiris, Salem, Namakkal, Viluppuram, Vellore, Dharmapuri and Thiruvannamalai districts.

The Nilgiris District is in the Indian state of Tamilnadu. The Nilgiris (English: Blue Mountains) is also the name given to a range of mountains spread across the states of Tamilnadu as well as Karnataka and Kerala. The altitude of the Nilgiris results in a much cooler and wetter climate than the surrounding plains, so the area is popular as a retreat from the summer heat. During summer the temperature remains to the maximum of 25°C and reaches a minimum of 10°C. During winter the temperature reaches a maximum of 20°C and a minimum of 0°C. The district headquarter is Ooty. The Nilgiris district comprises of six taluks namely Ooty, Coonoor, Kotagiri, Gudalur, Pandalur and Kundah. There are several tribes living in the Nilgiris, whose origins are

uncertain.

The best known of these are the Toda and Kota people, whose culture is based upon cattle, and whose red, black and white embroidered shawls, and silver jewelry is much sought after. The district is also the home to the Kurumba, Irula, Paniyan and Kattunaicken, as well as Badaga people. The Badagas are one of the major non-tribals, where Badagas was in triblist earlier (Reference, British Gazette 1931). According to the 2011 Census the Nilgiris district has the total population of 735,071 roughly equal to the population of Guyana or the Alaska of the US. In this, 32,813 are Scheduled Tribes. Among them 22,752 are in rural areas and 10,061 are in urban areas. The Nilgiris has a sex ratio of 1041 females for every 1000 males.

REVIEW OF RELATED STUDIES

Liu, Yangyang; Lu, Zuhong (2011) studied the Chinese High school students' stress in the school and academic achievement. In a sample of 466 Chinese High school students, they examined the relationships between Chinese High school students' stress and their academic achievements. Regression mixture modelling identified two different classes of the effects of Chinese High school students' stress on their academic achievements. One class contained 87% of the students. In this class, the students' stress negatively predicted their academic achievements. For the other 13% of the students, their stress did not predict their academic achievements. Furthermore, they found that gender did not moderate the relationships between Chinese High school students' stress in the school and their academic achievements.

Shankar, Nilani L. et.al (2016) examined the effects of stress on students' physical and mental health and academic success. Their article provides a conceptual overview of the direct (e.g., psycho neuro immunological, endocrine) and indirect (health behaviour) pathways through which stress affects physical health, the psychological effects of stress on mental health, and the cognitive effects of stress (e.g., attention, concentration) on academic success. They review relevant literature highlighting these links and suggest directions for future research and interventions.

NEED FOR THE STUDY

In today's world, people's lifestyles have been totally changed because physical and socio-cultural environment have drastically changed with the advent of information technology. This new lifestyles have led to stress. Stress is a normal part of everyday life and occurs whenever our bodies and minds face with demands which tax or exceed our capacity to respond. Knowing one's own strengths and weaknesses definitely yields best results. Stress has direct influence on the achievement in academics.

People have very different ideas with respect to their definition of stress. Probably the most common is, "physical, mental, or emotional strain or tension". Stress is defined as a mentally or emotionally distracting condition occurring because of difficult pressure. Stress is a contributing factor in causing numerous emotional and behavioral difficulties including depression, anxiety, temper, tantrums, suicide attempts, child abuse, physical ill health, physical assault, destructive expression of anger, feelings of bitterness, irritability, impatience and stuttering (Greenburg, 1980). Stress is a common experience, but when it exceeds one's limit it needs to be considered. The concept of stress in relation to the living organism was studied by Selye (1956). Some sources of stress are as follows, Interpersonal issue (deep emotions, workload, physical problems, etc.,), Personality related stress (fear of failure, committing mistakes, inattention,

etc.,), Environmental stress (excessive noise and heat, lack of ventilation, crowded, etc.,), Change induced stress (fear of change, fear of the unknown, etc.,) and Physiological stress (physical ill health, diseases, infections, toxins, injuries, etc.,).

In the present study, the term stress refers to the way the individual occurs in response to situations or events that disrupt or threaten ones physical or psychological functioning.

In view of the above, academic achievement most likely seems to be one of the predictors of peoples' success in general and pupils' success in their career in particular. Hence, it is to be noted that academic achievement is an outcome of the instructions provided to the children in schools, which is determined by the grades, marks secured by the students in the examinations. In the present study, the term academic achievement is the knowledge acquired and the skills developed in a school subject generally indicated by marks obtained in tests or examinations.

Therefore, it is decided to study the influence of stress on academic achievement. Hence, the present study is undertaken to get a clear picture of the correlative effect of stress of tribal students on their academic achievement.

OBJECTIVES OF THE STUDY

- To find out the nature of relationship that exists between academic achievements and stress of the tribal students.
- To find out whether there is any significant difference between male and female tribal students with respect to stress and academic achievement.
- To find out whether there is any significant difference between students of joint family and students of nuclear family with regard to stress and academic achievement.
- To find out whether there is any significant difference between rural students and urban students with respect to stress and academic achievement.

HYPOTHESES OF THE STUDY

- There is no significant relationship between academic achievements with respect to stress of the tribal students.
- There is no significant difference between male and female tribal students with respect to stress and academic achievement.
- There is no significant difference between students of joint family and students of nuclear family with regard to stress and academic achievement.
- There is no significant difference between rural students and urban students with respect to stress and academic achievement.

METHODOLOGY

In order to achieve the above cited objectives, the investigator has employed the "survey method". Survey method is a method for collecting and analyzing the data, obtained from large number of respondents representing specific population collected through highly structured and detailed questionnaire. The aspects of methodology followed are population, sample, tools and statistical techniques.

SAMPLE

For the purpose of the present study, a sample of students studying in class IX was drawn from different schools of The Nilgiris district in Tamilnadu. The investigator selected the sample of

300 (157 male, 143 female) tribal students of The Nilgiris district in Tamilnadu.

TOOLS USED

The selection of the tool is very important for any research. For the purpose of collecting data related to different variables covered in this study, the following tool has been employed.

1. The investigator developed a questionnaire for stress, and the reliability and validity have been established. The developed tool was used for collecting data. This questionnaire consists of 35 items. There are both positive and negative items. The stress questionnaire was designed as a five point rating scale (Always, Mostly, Sometimes, Rarely, and Not at all).
2. For measuring the academic achievement, the aggregate marks of the half yearly examination of the tribal students were collected from the office records of the schools. These marks were converted in to standardized scores for the purpose of statistical analysis.

ANALYSIS OF DATA

The data was computerized and analyzed for the statistical techniques viz. mean value, standard deviation, 't' test and Carl Pearson's Product moment correlation. The data is presented in the following tables.

Table 1: 't' test for the mean scores of stress and academic achievement of tribal students with respect to gender.

Variables	Gender	N	Mean	S.D	t-value	Result at 5% level
Stress	Male	157	31.48	9.364	1.287	N.S
	Female	143	30.13	8.858		
Academic achievement	Male	157	126.57	28.807	0.583	N.S
	Female	143	128.33	23.434		

The 't' test has been applied to find out whether there is any significant difference between the male and female tribal students with respect to stress and academic achievement. There is conclusive evidence in the study to show that there is no significant difference between the male and female tribal students in their stress ('t'=1.287) and academic achievement ('t'=0.583) as 't' values are not significant at 0.05 level. The mean value of stress indicates that the stress of male students is higher than the female students. It further indicates that the academic achievement of female students is higher than the male students.

Table 2: 't' test for the mean scores of stress and academic achievement of tribal students with respect to type of family.

Variable	Type of family	N	Mean	S.D	t-value	Result at 5% level
Stress	Nuclear	116	30.12	8.643	2.256	Sig.
	Joint	184	33.22	10.334		
Academic achievement	Nuclear	116	127.02	25.668	0.486	N.S
	Joint	184	128.91	28.514		

There is conclusive evidence in the table (2) that there is a significant difference between the students of nuclear family and students of joint family with respect to their stress as 't' ('t'=2.256) value is significant at 0.05 level. The mean value of stress indicates that the students living in joint families have more stress than the students living in nuclear families. The nuclear and joint family tribal students do not differ significantly in their academic achievement as 't' value ('t'=0.486) is not significant at 0.05 level.

Table 3: 't' test for the mean scores of stress and academic achievement of tribal students with respect to location.

Variable	Location	N	Mean	S.D	t-value	Result at 5% level
Stress	Rural	182	29.77	9.636	1.996	Sig
	Urban	118	31.87	8.496		
Academic achievement	Rural	182	126.05	24.341	0.914	N.S
	Urban	118	128.82	38.105		

From the table (3) it is understood that there is a significant difference between the rural and urban tribal students in their stress as 't' value ('t'=1.996) which is significant at 0.05 level. The mean value indicates that the students residing in urban area have more stress than the students residing in rural area. It further indicates that the rural and urban tribal students do not differ significantly in their academic achievement as 't' value ('t'=0.914) is not significant at 0.05 level. It further indicates that the academic achievement of urban tribal students is higher than the rural tribal students.

Table 4: **Pearson's Product moment correlation.**

Variables compared	Number of Tribal students	Co-efficient of correlation(r) value	Level of significance
stress and Academic achievement	300	- 0.823	0.05

The above table shows that there is a significant negative relationship between the academic achievement of tribal students and their stress ('r' = -0.823) as 'r' value is significant at 0.05 level.

MAJOR FINDINGS
The following are the important findings of the study:

❖ The male and female tribal students do not differ significantly in their stress and academic achievement. The stress of male students is higher than the female students. The academic achievement of female students is higher than the male students.

❖ The nuclear and joint family tribal students differ significantly in their stress. The mean value of stress indicates that the students living in joint families have more stress than the students living in nuclear families. The nuclear and joint family tribal students do not differ significantly in their academic achievement. The academic achievement of joint family students is higher than the nuclear family students.

❖ The rural and urban tribal students differ significantly in their stress. The mean value of stress indicates that the students residing in urban area have more stress than the students residing in rural area. The rural and urban tribal students do not differ significantly in their academic achievement. The academic achievement of urban students is higher than the rural students.

❖ The academic achievement of tribal students is negatively correlated with their stress. There is a significant negative relationship between the academic achievement and stress.

CONCLUSION
In our everyday situation, we have been highly influenced by stress. Stress lies within us. It arises as a result of our reactions to wordly events. Once we stop reacting, we will no longer get stressed. In this study, stress has direct influence on the academics. The academic achievement of tribal students is highly influenced by the stress, because stress is the combination of psychological, physiological and behavioural reactions that people have in response to events that threaten or challenge them. Stress is an agitated physiological state in which the electrical

transmission of information along neurons is heightened to the point that the nervous system may collapse or performs poorly. Stress is also a psychological factor which has direct influence on the achievement in academics. In the present study, the academic achievement of tribal students is highly influenced by the psychological factors. It is concluded that there will be low academic achievement in tribal students who have a high degree of stress.

REFERENCES

1. **Annaraja,P. and Joseph, N.M.** (2007). Interpersonal relationship and stress coping ability of Teacher Trainees. Journal of Educational Research and Extension, Vol.44 (2), p15-27.
2. **Aldwin, C.** (1994). Stress, Coping and Development. NewYork: Guilford Press.
3. **Best John, W.** (1986). "Research in Education," Prentice Hall, New Delhi.
4. **Hassell, R., Rose, J. and Mc Donald, J.** (2005). Parenting stress in mothers of children with an intellectual disability. The effect of parental cognitions in relation to child's characteristics and family support. Journal of Intellectual Disability Research, Vol.49 (6), p405-418.
5. **Liu, Yangyang; Lu, Zuhong** (2011). The Chinese High School Students' Stress in the School and Academic Achievement. Educational Psychology, v31 n1 p27-35.
6. **Raju, S. Raj, H.** (1993). Scheduled Tribes Students in Wynad; "Study on their Academic Achievement". Creative Psychologist, 5 (I1 and 2), 29- 33.
7. **Selye, H.** (1956). The Stress of Life. New York:McGraw Hill.
8. **Selye, H.** (1974). Stress without Disteress. New York: Lippincourt.
9. **Shankar, Nilani L.; Park, Crystal L.** (2016). Effects of Stress on Students' Physical and Mental Health and Academic Success. International Journal of School & Educational Psychology, v4 n1 p5-9.
10. **Shukla, Neerja** (1995). "Effectiveness of Various Interventions for Improving Tribal Education," In School Effectiveness and Learning Achievement at Primary Stage: International Perspective, NCERT, New Delhi.
11. **Sixth Survey** of Educational Research 1993 -2000. Volume – II, NCERT, New Delhi; 20 – April – 2007.
12. **Wolff, H.G.** (1953) Stress and Disease. Springfield, III C.C. Thomas.
13. **Khan, Zamirullah; Lanin, Abul Barkat; Ahmad, Naseem** (2015). The Level of Stress in Male and Female School Students. Journal of Education and Practice, v6 n13 p166-168.
14. **Eskicumali, Ahmet; Arslan, Serhat; Demirtas, Zeynep** (2015). Utilization of Information and Communication Technologies as a Predictor of Educational Stress on Secondary School Students. Turkish Online Journal of Educational Technology - TOJET, v14 n2 p241-246.
15. **Goldstein, Sara E.; Boxer, Paul; Rudolph, Erin** (2015). Middle School Transition Stress: Links with Academic Performance, Motivation, and School Experiences. Contemporary School Psychology, v19 n1 p21-29.

WEBLIOGRAPHY

www.ncert.gov.in
www.tn2011census.com
www.5yearplansinindia.gov.in
www.ERIC.com
www.adivasiindia.com